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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,618	02/23/2004	Nigel Hugh Sanders	360.7169USV	8388

7590 12/03/2004

PAUL D. GREELEY, ESQ.
OHLANDT, GREELEY, RUGGIERO & PERLE, L.L.P.
10th FLOOR
ONE LANDMARK SQUARE
STAMFORD, CT 06901-2682

EXAMINER

EDWARDS, LAURA ESTELLE

ART UNIT PAPER NUMBER

1734

DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/784,618

Applicant(s)

SANDERS ET AL

Examiner

Laura Edwards

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13 and 17-32 is/are pending in the application.
- 4a) Of the above claim(s) 26-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 13, 17, 18, 21 and 23-25 is/are rejected.
- 7) ☒ Claim(s) 19, 20 and 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/600,769.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 13 and 17-25, drawn to a first coating apparatus for coating articles with a solidifiable liquid, classified in class 118, subclass 13.
- II. Claims 26-32, drawn to a second apparatus for coating an article with a liquid, classified in class 118, subclass 410.

The inventions are distinct, each from the other because of the following reasons:

The invention of Group I is deemed an independent and distinct invention of Group II because the invention of Group I is for coating a plurality of articles via supply means via a gas stream associated on, attached to, or between the surface of the supply means and the solidifiable liquid while the invention of Group II is to an apparatus for coating a single article using a container which holds or retains a volume of liquid to form a liquid curtain with a gas layer between the surface of the liquid and the container near the container opening. The invention of Group I differs from that of Group II because the supply means is not required to be a container which is a means for holding or retaining a volume of liquid. The invention of Group II could be construed to be a coating liquid tank with a weir type arrangement whereby coating liquid overflows to form a curtain onto a discrete article.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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During a telephone conversation with Mr. Greeley on 11/12/04 a provisional election was made with traverse to prosecute the invention of Group I, claims 13 and 17-25. Affirmation of this election must be made by applicant in replying to this Office action. Claims 26-32 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 24 and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed fails to teach or suggest a pressure controller as

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recited in new claims 24 and 25. Applicants should note that the drawings also do not show a pressure controller.

Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 23, lines 3-4, "the Coanda effect" lacks antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 13 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Fisher et al (US 4,871,105).

Fisher et al teach an apparatus for applying a coating to articles comprising supply means (44, 54) arranged to provide a curtain of solidifiable liquid coating material, the supply means having a surface along which the solidifiable liquid coating material flows; means (34) for effecting relative movement between articles (10) coated and the supply means (44, 54) whereby in use the articles are coated with solidifiable liquid coating material in the curtain; and means (46, 50) arranged to subject the solidifiable liquid coating material to the action of at least one stream of gas on the surface whereby to modify the flow characteristics of the curtain.

Claims 13, 17, 18, 21, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Naka et al (US 5,902,648).

Naka et al teach an apparatus for applying a coating to articles (col. 1, lines 7-13) comprising supply means (4c) arranged to provide a curtain of solidifiable liquid coating material, the supply means having a surface along which the solidifiable liquid coating material flows; means (3 or 5) for effecting relative movement between articles (2) coated and the supply means whereby in use the articles are coated with solidifiable liquid coating material in the curtain; and means (40c, 42c) arranged to subject the solidifiable liquid coating material to the action of at least one stream of gas on the surface whereby to modify the flow characteristics of the curtain.

With respect to claim 18, Naka et al teach means (4c) for supplying a solidifiable liquid coating material, said supply means having a surface along which the solidifiable liquid coating

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material flows; an outlet slot (area 20c of Fig. 13) positioned downstream of the supply means through which the solidifiable liquid coating material flows under the action of gravity to form a curtain; means (3 or 5) for effecting relative movement between the articles and the supply means whereby in use the articles are coated with the solidifiable liquid coating material in the curtain; and means (40c, 42c) for introducing a first gas stream between the surface and the solidifiable liquid coating material so that flow characteristics of the curtain are modified.

With respect to claim 21, see col. 11, lines 17-20.

With respect to claim 25, inherently the gas supply is controlled as evidenced by col. 4, lines 55-63 and col. 5, lines 14-27.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al (US 1,984,009) in view of Baker et al (US 1,737,447).

Baker et al '009 teaches teach an apparatus for applying a coating to food goods comprising supply means (8) arranged to provide a curtain of solidifiable liquid coating material, the supply means having a surface along which the solidifiable liquid coating material flows and means (9) arranged to subject the solidifiable liquid coating material to the action of at least one stream of gas on the surface whereby to modify the flow characteristics of the curtain. Baker et al are silent concerning how the goods are moved relative to the supply means for coating purposes. However, it was known in the art, at the time the invention was made, to provide a conveyor means (h) for effecting relative movement between food goods or articles coated and the liquid curtain supply means as evidenced by Baker et al '447. It would have been obvious to one of ordinary skill in the art to incorporate the conveyor means as taught by Baker et al '447 in Baker et al '009 apparatus in order to convey the food goods or articles to and from the liquid curtain supply means.

Allowable Subject Matter

Claims 19, 20, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 19 and 20 would be allowable because there is no teaching or suggestion in the prior art of an apparatus for coating food articles comprising the combination of means for supplying a solidifiable edible liquid coating material, said supply means having a surface along which the coating material flows; an outlet slot positioned downstream of the supply means through which the coating material flows under the action of gravity to form a curtain; means for effecting relative movement between the articles and the supply means whereby in use the articles are coated with the coating material in the curtain; and means for introducing a first gas stream between the surface and the coating material so that flow characteristics of the curtain are modified.

Claims 22 and 23 would be allowable because there is no teaching or suggestion in the prior art of an apparatus for coating articles comprising means for supplying a solidifiable liquid coating material, said supply means having a surface along which the solidifiable liquid coating material flows; an outlet slot positioned downstream of the supply means through which the solidifiable liquid coating material flows under the action of gravity to form a curtain; means for effecting relative movement between the articles and the supply means whereby in use the articles are coated with the solidifiable liquid coating material in the curtain; means for introducing a first gas stream between the surface and the solidifiable liquid coating material so

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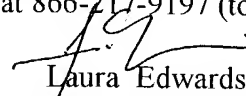
that flow characteristics of the curtain are modified; and means for introducing a second gas stream to the solidifiable liquid coating material after the curtain has been established in order to change a direction of the curtain and/or a physical property of the solidifiable liquid coating material forming the curtain.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Edwards whose telephone number is (571) 272-1227. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Laura Edwards
Primary Examiner
Art Unit 1734

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December 1, 2004